

REMARKS

Claims 1-11 are currently pending in this application, as amended. By this Amendment, claims 1 and 6 have been amended in order to more clearly claim the subject matter Applicant regards as the invention, and claim 12 has been cancelled. No new matter has been introduced into the application by this Amendment.

In the Action, the Examiner rejected claim 12 under 35 U.S.C. §112, fourth paragraph, as being in improper dependent form for failing to further limit the subject matter of a previous claim. Applicant respectfully traverses this rejection. However, in order secure prompt allowance of this application, Applicant has cancelled claim 12, without prejudice. Accordingly, Applicant respectfully submits that this rejection is moot.

The Examiner rejected claims 1-5 under 35 U.S.C. §103 as being unpatentable over Applicant's prior U.S. Patent 5,167,579 (hereinafter "Rotter '579") in combination with U.S. Patent 4,453,356 to Kellogg et al. (hereinafter "Kellogg et al.") and U.S. Patent 3,884,009 to Frohlich et al. (hereinafter "Frohlich et al"). The Examiner states that Rotter '579 discloses a sloped roof with the underlying sheeting, shingles, a vent slot disposed along the roof ridge and adapted to permit air from an interior space under the roof to flow through the slot and a strip having an undersurface contacting the shingles, with the strip being made of randomly aligned synthetic fibers, and a ridge cap overlying the slot. The Examiner admits that Rotter '579 does not disclose a sheet having a plurality of projections

or a strip having a surface shaped to match the projections on the sheet. The Examiner cites Kellogg et al. as teaching a metal roof having a plurality of panels which include a plurality of projections, with the projections overlapping each adjoining panel along the lateral edges. The Examiner cites Frohlich et al. as teaching that it is known to provide a corrugated roof sheet (1) with a layer of insulating material that has a surface which matches the corrugations of the roof sheet. The Examiner then concludes that it would have been obvious to the ordinarily skilled artisan to combine the teachings of Kellogg et al. and Frohlich et al. with Rotter '579 to arrive at the present invention.

Applicant strenuously, but respectfully, traverses this rejection. Amended claim 1 recites a building structure having a sloped roof and a sheet overlying the decking, with the sheet having a plurality of projections which extend upward and away from the decking. A slot is provided along the roof ridge and a strip, having an air permeable and resilient portion and having a surface including a plurality of recesses shaped to match the projections on the sheet, is provided in engagement with the sheet. A ridge cap is provided overlying the slot and the strip such that the air permeable and resilient portion of the strip is adapted to allow the flow of vapors from within the structure to prevent deterioration.

As admitted by the Examiner, Rotter '579 does not disclose the use of a sheet having a plurality of projections on the roof or the use of a strip, having a portion which is air permeable and resilient, which has a surface including a

plurality of recesses shaped to match the projections of the sheet. Kellogg et al. discloses that corrugated sheets are known in the art. However, Kellogg et al. is silent with respect to ventilation of a building structure. Frohlich et al. discloses a method of ventilating a cementitious roof layer into a building.

In the Frohlich et al. roof construction, a layer of lightweight insulating concrete (7) is first applied to the corrugated subdeck (1) and the concrete is screeded to the height of the corrugations so that essentially only the valleys of the corrugations are filled. As shown in Fig. 2, slots are provided through the corrugated subdecking and a layer of normally impermeable foamed polystyrene board (3) is placed above the concrete layer (7). Openings (4) are provided in the polystyrene board (3) and some of the openings (4) are aligned with the slots (2) in the subdecking (1) along the peaks of the corrugations. A second layer of insulating concrete (5) is installed over the polystyrene board (3) and a layer of waterproofing (6) is installed over the layer of insulating concrete (5). The aligned apertures (4) and slots (2) allow moisture from the roof structure to pass into the enclosed building space.

The additional layer (7) of lightweight insulating concrete which is screeded into the spaces between the corrugation does not form any type of strip because the concrete is screeded to the height of the corrugations as noted in column 3, line 57-67, forming discrete fillers. Nothing in Frohlich et al. discloses or suggests a sheet with projections overlying the decking or a strip having a surface with a plurality of recesses which match the projections, with the strip having an air

permeable and resilient portion for venting the vapors from within a structure to an exterior area. Frohlich et al. actually teaches venting moisture from the cementitious layers into the building. Accordingly, Applicant respectfully submits that Frohlich et al. is not even properly combinable with Rotter '579.

Even if Frohlich et al. is combined with Rotter '579 and Kellogg et al., it would provide for screeding an insulating layer of concrete into the corrugations of the sheet of the present invention. Nothing suggests modifying the strip of Rotter '579 to provide a matching surface to the corrugations. In fact, this would not be required at all because the corrugations would be filled with cement. This clearly does not disclose or suggest the claimed invention. Applicant respectfully submits that claim 1 is not suggested or disclosed by the combination of references cited by the Examiner. Claims 2-5 depend from claim 1 and are similarly non-obvious. Accordingly, Applicant respectfully requests withdrawal of the obviousness rejection of claims 1-5.

It is well settled that when making a rejection under 35 U.S.C. §103, the Examiner has the burden of establishing a *prima facie* case of obviousness. The Examiner can satisfy this burden only by showing objective teaching in the prior art, or that knowledge generally available to one of ordinary skill in the art, would lead that individual to combine the relevant teachings of the references in the manner suggested by the Examiner. In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention in the absence of

some teaching, suggestion or incentive supporting the combination. In re Geiger, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987). A prior art reference does not make an invention obvious unless something in the particular prior art reference would suggest the advantages to be derived from modifying the reference. In re Sernaker, 217 USPQ 1, 6 (Fed. Cir. 1983). The mere fact that the prior art could be modified in the manner proposed by the Examiner does not make the modification obvious unless the prior art suggests the desirability of the modification. Ex parte Dussaud, 7 USPQ2d 1818, 1820 (PTO Bd. App. & Int. 1988).

It is respectfully submitted that in making the present rejections, the Examiner has employed impermissible hindsight in using Applicant's disclosure and claims to conduct a search of the prior art to locate references which teach portions of Applicant's novel building structure. Frohlich et al. is clearly directed to allowing moisture to flow into an enclosed structure, and is not directed to the ventilation of vapors from within an enclosed structure to an exterior area. Additionally, even if the references are combined as suggested by the Examiner, the application of a layer of insulating cement to the sheet of the present invention to fill in the spaces between the projections does not suggest providing a strip having a surface including a plurality of recesses shaped to match the projections of the sheet, with the strip having an air permeable and resilient portion. Accordingly, Applicant respectfully submits that claims 1-5 are patentable over the combination cited by the Examiner.

The Examiner also rejected claims 6-11 under 35 U.S.C. §102(b) as being anticipated by Rotter '579. The Examiner states that the limitations such as the roof having a decking and a metal sheet overlying the decking and a metal sheet having a plurality of projections and the strip having a shape to compliment the projections have not been given any patentable weight because they are not actual method steps of installing a roof.

Applicant has amended claim 6 to recite the step of aligning the recesses in the surface of the strip with the complimentary projections of the metal sheet and installing the strip to the metal sheet so that the surface engages the metal sheet. Rotter '579 does not teach aligning recesses in the surface of the strip with the complimentary projections of the metal sheet. No aligning step is suggested or disclosed by Rotter '579 because the air permeable and resilient strip of Rotter '579 has smooth surfaces. Accordingly, Applicant respectfully requests withdrawal of the §102(b) rejection of claim 6. Claim 7-11 depend directly or indirectly from claim 6 and are similarly not anticipated by Rotter '579.

Applicant has reviewed the Notice of Draftsperson's Patent Drawing Review and respectfully requests deferral of the submission of formal drawings until after the receipt of a notice of allowance.

If the Examiner believes that an interview would help to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the Examiner's convenience.

In view of the foregoing amendment and remarks,
Applicant respectfully submits that the present application,
including claims 1-11, is in condition for allowance and such
action is respectfully requested.

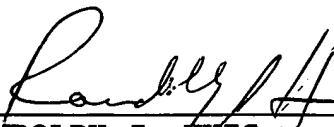
Respectfully submitted,

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Date

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